

CLAIMS

What is claimed is:

1. A data processing apparatus comprising:

a body having a memory for storing program code and data, and a processor for processing the program code and data, and a first group of control elements and a second group of control elements for entering data and performing control operations;

a numeric keypad moveably coupled to the body, the numeric keypad moveable from a first keypad position to a second keypad position in relation to the body, wherein both the first and second groups of control elements are exposed when the numeric keypad is in the second position, and wherein only the second group of control elements are exposed when the numeric keypad is in the first position; and

a display moveably coupled to the numeric keypad, the display moveable from a first display position to a second display position in relation to the numeric keypad, wherein the numeric keypad is not exposed when the display is in the first position and wherein the numeric keypad is exposed when the display is in the second position.

2. The data processing apparatus as in claim 1 wherein the body comprises one or more tracks and wherein the numeric keypad comprises one or more pins for engaging with the tracks and guiding the numeric keypad from the first keypad position to the second keypad position in relation to the body.

3. The data processing apparatus as in claim 2 wherein the numeric keypad comprises one or more tracks and wherein the display comprises one or more pins for engaging with the tracks and guiding the display from the first display position to the second display position in relation to the numeric keypad.

4. The data processing apparatus as in claim 1 wherein a surface of the numeric keypad is parallel to a surface of the body when in the first keypad position and wherein the surface of the numeric keypad and the surface of the body are not parallel when the numeric keypad is in the second keypad position.

5. The data processing apparatus as in claim 1 wherein the first group of control elements are covered by the numeric keypad when the numeric keypad is in the first position.

6. The data processing apparatus as in claim 1 wherein the first group of control elements comprise a keyboard.

7. The data processing apparatus as in claim 5 wherein the second group of control elements are not covered by the numeric keypad when the numeric keypad is in the first position.

8. The data processing apparatus as in claim 7 wherein the second group of control elements comprise a control knob and a set of control buttons.

9. The data processing apparatus as in claim 1 wherein the second display position is associated with a telephony mode of operation of the data processing apparatus and wherein the numeric keypad is a telephony keypad.

10. The data processing apparatus as in claim 9 wherein the first keypad position is associated with the telephony mode of operation.

11. The data processing apparatus as in claim 1 wherein a surface of the display is parallel to a surface of the numeric keypad when the display is in the first display position and wherein the surface of the display and the surface of the numeric keypad are not parallel when the display is in the second display position.

12. The data processing apparatus as in claim 1 wherein the numeric keypad is coupled to the body at a pivot point and rotatable around the pivot point from the first keypad position to the second keypad position in relation to the body.

13. The data processing apparatus as in claim 12 further comprising:
a switch configured to trigger when the numeric keypad is rotated between the first position and the second position; and
image inversion logic to invert images on the display responsive to the switch triggering.

14. The data processing apparatus as in claim 1 having a first operational mode and a second operational mode associated with the first keypad position and the second keypad position, respectively.

15. The data processing apparatus as in claim 14 wherein the second operational mode comprises a data entry mode in which text may be entered via the first group of control elements.

16. The data processing apparatus as in claim 14 having a third operational mode associated with the first keypad position and the second display position, the third operational mode for performing telephony functions.

17. A data processing apparatus comprising:

- a body having a memory for storing program code and data, and a processor for processing the program code and data, and a plurality of control elements for entering data and performing control operations;
- a numeric keypad moveable from a first keypad position to a second keypad position in relation to the body, wherein certain of the plurality of control elements are exposed when the numeric keypad is in the second position and covered when the numeric keypad is in the first position; and
- a display moveable from a first display position to a second display position in relation to the numeric keypad, wherein the numeric keypad is not exposed when the display is in the first position and wherein the numeric keypad is exposed when the display is in the second position.

18. The data processing apparatus as in claim 17 wherein the body comprises one or more tracks and wherein the numeric keypad comprises one or more pins for engaging with the tracks and guiding the numeric keypad from the first keypad position to the second keypad position in relation to the body.

19. The data processing apparatus as in claim 18 wherein the numeric keypad comprises one or more tracks and wherein the display comprises one or more pins for engaging with the tracks and guiding the display from the first display position to the second display position in relation to the numeric keypad.

20. The data processing apparatus as in claim 17 wherein a surface of the numeric keypad is parallel to a surface of the body when in the first keypad position and wherein the surface of the numeric keypad and the surface of the body are not parallel when the numeric keypad is in the second keypad position.

21. The data processing apparatus as in claim 17 wherein the first group of control elements are covered by the numeric keypad when the numeric keypad is in the first position.

22. The data processing apparatus as in claim 17 wherein certain of the plurality of control elements comprise a keyboard.

23. The data processing apparatus as in claim 21 wherein a group of the plurality of control elements are not covered by the numeric keypad when the numeric keypad is in the first position.

24. The data processing apparatus as in claim 23 wherein the group of the plurality of control elements comprise a control knob and a set of control buttons.

25. The data processing apparatus as in claim 17 wherein the second display position is associated with a telephony mode of operation of the data processing apparatus and wherein the numeric keypad is a telephony keypad.

26. The data processing apparatus as in claim 25 wherein the first keypad position is associated with the telephony mode of operation.

27. The data processing apparatus as in claim 17 wherein a surface of the display is parallel to a surface of the numeric keypad when the display is in the first display position and wherein the surface of the display and the surface of the numeric keypad are not parallel when the display is in the second display position.

28. The data processing apparatus as in claim 17 wherein the numeric keypad is coupled to the body at a pivot point and rotatable around the pivot point from the first keypad position to the second keypad position in relation to the body.

29. The data processing apparatus as in claim 28 further comprising:
a switch configured to trigger when the numeric keypad is rotated between the first position and the second position; and
image inversion logic to invert images on the display responsive to the switch triggering.

30. The data processing apparatus as in claim 17 having a first operational mode and a second operational mode associated with the first keypad position and the second keypad position, respectively.

31. The data processing apparatus as in claim 30 wherein the second operational mode comprises a data entry mode in which text may be entered via the first group of control elements.

32. The data processing apparatus as in claim 30 having a third operational mode associated with the first keypad position and the second display position, the third operational mode for performing telephony functions

33. An apparatus comprising:

data processing device means having a memory for storing program code and data, and a processor for processing the program code and data, and a plurality of control elements for entering data and performing control operations;

numeric data entry means moveable from a first keypad position to a second keypad position in relation to the data processing device means, wherein certain of the plurality of control elements are exposed when the numeric data entry means is in the second position and covered when the numeric data entry means is in the first position; and

display means moveable from a first display position to a second display position in relation to the numeric data entry means, wherein the numeric data entry means is not exposed when the display is in the first position and wherein the numeric data entry means is exposed when the display is in the second position.